IN THE CLAIMS

Please amend Claims 8, 42 and 49-52 as follows:

1. (Original) A method for determining one or more fine-tuned estimates of delay value associated with a received signal, the method comprising the computer-implemented steps of:

determining a range of delay values of interest associated with the received signal;

interpolating fine-grained values for I and Q correlation integrals by using a subset of coarse-grained calculations of I and Q correlation integrals; and

determining the one or more fine-tuned estimates of delay value based on the fine-grained values of I and Q correlation integrals.

2. (Original) The method of Claim 1, wherein determining a range of delay values of interest further comprises the steps of:

determining one or more initial estimates of the delay value;

selecting one of the one or more initial estimates of delay value to be a selected initial estimate of delay value; and

selecting a range of delay values in the neighborhood of the selected initial estimate of delay value to be the range of delay values of interest.

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3. (Original) The method of Claim 2, wherein selecting a range of delay values in the neighborhood of the selected initial estimate of delay value to be the range of delay values

of interest is a function of the selected initial estimate of delay value and a pre-selected confidence level.

4. (Original) The method of Claim 1, wherein the subset of coarse-grained calculations of I and Q correlation integrals is based on:

a pre-selected desired accuracy; and

a type of filter that was used to filter the received signal.

5. (Original) The method of Claim 2, wherein determining the one or more initial estimates of the delay value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of delay values for a sampled data that is associated with the received signal;

calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of delay values; and

selecting a delay value that corresponds to a highest magnitude value corresponding to the coarse-grained calculations of I and Q correlation integrals as the one or more initial estimates of delay value.

6. (Original) The method of Claim 2, wherein determining the one or more initial estimates of delay value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of delay values for a sampled data that is associated with the received signal;

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calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of delay values; and

selecting one or more delay values that correspond to magnitude values that are above a pre-selected threshold magnitude value as the one or more initial estimates of delay value.

7. (Original) The method of Claim 2, wherein determining the one or more initial estimates of the delay value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of delay values for a sampled data that is associated with the received signal;

calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of delay values;

determining a highest magnitude value corresponding to the coarse-grained calculations of I and Q correlation integrals; and

selecting one or more delay values that correspond to magnitude values that are within a pre-selected magnitude range around the highest magnitude value as the one or more initial estimates of delay value.

8. (Currently amended) The method of Claim 5, wherein the hypothesized range of delay values is based on:

an approximate time when a receiver received the received signal; <u>and</u>

a time uncertainty quantity that is associated with the approximate time~~;~~

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~~an approximate position of the receiver; and~~

~~an position uncertainty quantity that is associated with the approximate position of the receiver~~.

9. (Original) The method of Claim 1, wherein interpolating fine-grained values for I and Q correlation integrals is based on a bandlimited interpolation technique.

10. (Original) The method of Claim 1, wherein the received signal is associated with a global positioning satellite vehicle.

11. (Original) The method of Claim 1, wherein determining the one or more fine-tuned estimates delay value based on the fine-grained values of I and Q correlation integrals comprises the steps of:

calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of delay values of interest; and

selecting one or more delay values that corresponds to a highest magnitude value corresponding to the fine-grained values of I and Q correlation integrals as the one or more fine-tuned estimates delay value.

12. (Original) The method of Claim 1, wherein determining one or more fine-tuned estimates delay value based on the fine-grained values of I and Q correlation integrals comprises the steps of:

calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of delay values of interest; and

selecting one or more delay values that correspond to magnitude values that are above

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a pre-selected threshold magnitude value as the one or more fine-tuned estimates of delay value.

13. (Original) The method of Claim 1, wherein determining one or more fine-tuned estimates delay value based on the fine-grained values of I and Q correlation integrals comprises the steps of:

calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of delay values of interest;

determining a highest magnitude value corresponding to the fine-grained values of I and Q correlation integrals; and

selecting one or more delay values that corresponds to magnitude values that are within a pre-selected magnitude range around the highest magnitude value as the one or more fine-tuned estimates of delay value.

14. (Original) A method for detenning one or more fine-tuned estimates of delay value associated with a received signal, the method comprising the computer-implemented steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of delay values for a sampled data that is associated with the received signal;

calculating a magnitude of the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of delay values; and

selecting a delay value from the hypothesized range of delay values that

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correspond to a highest magnitude value that corresponds to the coarse-grained calculations of I and Q correlation integrals as an initial estimate of delay value;

selecting a range of delay values in the neighborhood of the initial estimate of delay value to be a range of delay values of interest;

interpolating fine-grained values for I and Q correlation integrals by using a subset of coarse-grained calculations of I and Q correlation integrals;

calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of delay values of interest; and

selecting one or more delay values that corresponds to a highest magnitude value corresponding to the fine-grained values of I and Q correlation integrals as the one or more fine-tuned estimates delay value.

15. (Original) A method for determining one or more fine-tuned estimates of delay value associated with a received signal, the method comprising the computer-implemented steps of:

determining an initial range of delay values of interest associated with the received signal;

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over the initial range of delay values for a sampled data that is associated with the received signal;

calculating a magnitude of the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of delay values; and

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selecting a delay value from the hypothesized range of delay values that correspond to a highest magnitude value that corresponds to the coarse-grained calculations of I and Q correlation integrals as an initial estimate of delay value;

selecting a range of delay values in the neighborhood of the initial estimate of delay value to be a range of delay values of interest;

generating a parametric template that represents I and Q correlation integrals associated with the received signal; and

performing a linear regression on the range of delay values of interest to produce a delay error function that is based on the range of delay values of interest; and

selecting from the range of delay values of interest one or more delay values that minimize the delay error function as the fine-tuned estimates of delay value.

16. (Original) The method of Claim 15, wherein the step of selecting from the range of delay values of interest one or more delay values that minimize the delay error function comprise the steps of:

from the range of delay values of interest, selecting a target delay value that produces a minimum value of the delay error function; and

from the range of delay values of interest, selecting a range of delay values around the target delay value as the one or more fine-tuned estimates of delay value.

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17. (Original) The method of Claim 15, wherein the step of selecting from the range of delay values of interest one or more delay values that minimize the delay error

function comprises the steps of:

selecting from the range of delay values of interest one or more delay values for which the delay error function is below a pre-selected threshold value of the delay error function as the one or more fine-tuned estimates delay value.

18. (Original) A method for determining one or more fine-tuned estimates of carrier frequency value associated with a received signal, the method comprising the computer-implemented steps of:

determining a range of carrier frequency values of interest associated with the received signal;

interpolating fine-grained values for I and Q correlation integrals by using a subset of coarse-grained calculations of I and Q correlation integrals; and

determining the one or more fine-tuned estimates of carrier frequency value based on the fine-grained values off and Q correlation integrals.

19. (Original) The method of Claim 18, wherein determining a range of can-icr frequency values of interest further comprises the steps of:

determining one or more initial estimates of carrier frequency value;

selecting one of the one or more initial estimates of carrier frequency value to be a selected initial estimate of carrier frequency value; and

selecting a range of carrier frequency values in the neighborhood of the selected initial estimate of carrier frequency value to be the range of carrier frequency values of interest.

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20. (Original) The method of Claim 18, wherein the subset of coarse-grained calculations off and Q correlation integrals is based on:

duration of the I and Q correlation integral;

a pre-selected confidence level; and

a type of filter that was used to filter the received signal.

21. (Original) The method of Claim 19, wherein determining the one or more initial estimates of carrier frequency value further comprises the steps of:

performing, if not already performed, a eoarse-grained calculation of I and Q correlation integrals over a hypothesized range of carrier frequency values for a sampled data that is associated with the received signal;

calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of carrier frequency values; and

selecting a carrier frequency value that corresponds to a highest magnitude value corresponding to the coarse-grained calculations of I and Q correlation integrals as the one or more initial estimates of carrier frequency value.

22. (Original) The method of Claim 19, wherein determining the one or more initial estimates of carrier frequency value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of carrier frequency values for a sampled data that is associated with the received signal;

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calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of carrier frequency values; and

selecting one or more carrier frequency values that correspond to magnitude values that are above a pre-selected threshold magnitude value as the one or more initial estimates of carrier frequency value.

23. (Original) The method of Claim 19, wherein determining the one or more initial estimates of carrier frequency value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of carrier frequency values for a sampled data that is associated with the received signal;

calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of carrier frequency values;

determining a highest magnitude value corresponding to the coarse-grained calculations of I and Q correlation integrals; and

selecting one or more carrier frequency values that correspond to magnitude values that are within a pre-selected magnitude range around the highest magnitude value as the one or more initial estimates of carrier frequency value.

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24. (Original) The method of Claim 18, wherein the received signal is associated with a global positioning satellite vehicle.

25. (Original) The method of Claim 18, wherein determining the one or more fine-tuned estimate of carrier frequency value based on the fine-grained values of I and Q correlation integrals comprises the steps of:

calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of carrier frequency values of interest; and

selecting one or more carrier frequency value that correspond to a highest magnitude value corresponding to the fine-grained values of I and Q correlation integrals as the one or more fine-tuned estimates carrier frequency value.

26. (Original) The method of Claim 18, wherein determining one or more fine-tuned estimates of carrier frequency value based on the fine-grained values of I and Q correlation integrals comprises the steps of:

calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of carrier frequency values of interest; and

selecting one or more carrier frequency values that correspond to magnitude values that are above a pre-selected threshold magnitude value as the one or more fine-tuned estimates carrier frequency value, respectively.

27. (Original) The method of Claim 18, wherein determining one or more fine-tuned estimates of carrier frequency value based on the fine-grained values of I and Q correlation integrals comprises the steps of:

calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of carrier frequency values of interest;

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determining a highest magnitude value corresponding to the fine-grained values of I and Q correlation integrals; and

selecting one or more carrier frequency values that correspond to magnitude values that are within a pre-selected magnitude range around the highest magnitude value as the one or more fine-tuned estimates carrier frequency value.

28. (Original) A method for determining one or more fine-tuned estimates of carrier frequency value associated with a received signal, the method comprising the computer-implemented steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of carrier frequency values for a sampled data that is associated with the received signal;

calculating a magnitude of the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of carrier frequency value; and

selecting a carrier frequency value from the hypothesized range of carrier frequency value that correspond to a highest magnitude value that corresponds to the coarse-grained calculations of I and Q correlation integrals as an initial estimate of earner frequency value;

selecting a range of earner frequency values in the neighborhood of the initial estimate of carrier frequency value to be a range of carrier frequency values of interest;

interpolating fine-grained values for I and Q correlation integrals by using a subset of coarse-grained calculations of I and Q correlation integrals;

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calculating magnitude values corresponding to the fine-grained values of I and Q correlation integrals over the range of carrier frequency values of interest; and

selecting one or more carrier frequency value that corresponds to a highest magnitude value corresponding to the fine-grained values of I and Q correlation integrals as the one or more fine-tuned estimates carrier frequency value.

29. (Original) A method for determining one or more fine-tuned estimates of carrier frequency value associated with a received signal, the method comprising the computer-implemented steps of:

determining an initial range of carrier frequency values of interest associated with the received signal;

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over the initial range of carrier frequency values for a sampled data that is associated with the received signal;

calculating a magnitude of the eoarse-grained calculations of I and Q correlation integrals over the hypothesized range of carrier frequency values; and

selecting a carrier frequency value from the hypothesized range of carrier frequency values that correspond to a highest magnitude value that corresponds to the coarse-grained calculations of I and Q correlation integrals as an initial estimate of carrier frequency value;

selecting a range of carrier frequency values in the neighborhood of the initial estimate of carrier frequency value to be a range of carrier frequency values of interest;

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generating a parametric template that represents I and Q correlation integrals associated with the received signal;

performing a linear regression on the range of carrier frequency values of interest to produce a carrier frequency error function that is based on the range of carrier frequency values of interest; and

selecting from the range of carrier frequency values of interest one or more carrier frequency values that minimize the carrier frequency error function as the fine-tuned estimates of carrier frequency value.

30. (Original) The method of Claim 29, wherein the step of selecting from the range of carrier frequency values of interest one or more carrier frequency values that minimize the carrier frequency error function comprises the steps of:

from the range of carrier frequency values of interest, selecting a target carrier frequency value that produces a minimum value of the carrier frequency error function; and

from the range of carrier frequency values of interest, selecting a range of carrier frequency values around the target carrier frequency value as the one or more fine-tuned estimates of carrier frequency value.

31. (Original) The method of Claim 29, wherein the step of selecting from the range of carrier requency values of interest one or more carrier frequency values that minimize the carrier frequency error function comprises the steps of:

selecting from the range of carrier frequency values of interest one or more carrier frequency values for which the carrier frequency error function is below a pre-

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selected threshold value of the carrier frequency error function as the one or more fine-tuned estimates carrier frequency value.

32. (Original) A method for determining one or more fine-tuned estimates of parameter values associated with a received signal, the method comprising the computer-implemented steps of:

determining a range of parameter values of interest associated with the received signal;

interpolating fine-grained values for I and Q correlation integrals by using a subset of coarse-grained calculations of I and Q correlation integrals; and

determining the one or more fine-tuned estimates of parameter value based on the fine-grained values of I and Q correlation integrals.

33. (Original) The method of Claim 32, wherein parameter values comprise a vector including all or a subset of multipath characteristics, signal power, delay, and carrier frequency.

34. (Original) The method of Claim 32, wherein determining a range of parameter values of interest further comprises the steps of:

determining one or more initial estimates of the parameter value;

selecting one of the one or more initial estimates of parameter value to be a selected initial estimate of parameter value; and

selecting a range of parameter values in the neighborhood of the selected initial estimate of parameter value to be the range of parameter values of interest.

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35. (Original) The method of Claim 34, wherein selecting a range of parameter values in the neighborhood of the selected initial estimate of parameter value to be the range of parameter values of interest is a function of the selected initial estimate of parameter value and a pre-selected confidence level.

36. (Original) The method of Claim 34, wherein determining the one or more initial estimates of the parameter value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of parameter values for a sampled data that is associated with the received signal;

calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of parameter values; and

selecting a parameter value that corresponds to a highest magnitude value corresponding to the coarse-grained calculations of I and Q correlation integrals as the one or more initial estimates parameter value.

37. (Original) The method of Claim 34, wherein determining the one or more initial estimates of parameter value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of parameter values for a sampled data that is associated with the received signal;

calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of parameter values; and

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selecting one or more parameter values that correspond to magnitude values that are above a pre-selected threshold magnitude value as the one or more initial estimates of parameter value.

38. (Original) The method of Claim 34, wherein determining the one or more initial estimates of the parameter value further comprises the steps of:

performing, if not already performed, a coarse-grained calculation of I and Q correlation integrals over a hypothesized range of parameter values for a sampled data that is associated with the received signal;

calculating magnitude values corresponding to the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of parameter values;

determining a highest magnitude value corresponding to the coarse-grained calculations of I and Q correlation integrals; and

selecting one or more parameter values that correspond to magnitude values that are within a pre-selected magnitude range around the highest magnitude value as the one or more initial estimates of parameter value.

39. (Original) A method for determining one or more fine-tuned estimates of parameter value associated with a received signal, the method comprising the computer-implemented steps of:

determining an initial range of parameter values of interest associated with the received signal;

performing, if not already performed, a coarse-grained calculation of I and Q

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correlation integrals over the initial range of parameter values for a sampled data that is associated with the received signal;

calculating a magnitude of the coarse-grained calculations of I and Q correlation integrals over the hypothesized range of parameter values; and

selecting a parameter value from the hypothesized range of parameter values that correspond to a highest magnitude value that corresponds to the coarse-grained calculations of I and Q correlation integrals as an initial estimate of parameter value;

selecting a range of parameter values in the neighborhood of the initial estimate of parameter value to be a range of parameter values of interest;

generating a parametric template that represents I and Q correlation integrals associated with the received signal; and

performing a linear regression on the range of parameter values of interest to produce a parameter error function that is based on the range of parameter values of interest; and

selecting from the range of parameter values of interest one or more parameter values that minimize the parameter error function as the fine-tuned estimates of parameter value.

40. (Original) The method of Claim 39, wherein the step of selecting from the range of parameter values of interest one or more parameter values that minimize the parameter error function comprises the steps of:

from the range of parameter values of interest, selecting a target parameter

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value that produces a minimum value of the parameter error function; and

from the range of parameter values of interest, selecting a range of parameter values around the target parameter value as the one or more fine-tuned estimates of parameter value.

41. (Original) The method of Claim 39, wherein the step of selecting from the range of parameter values of interest one or more parameter values that minimize the parameter error function comprises the steps of:

selecting from the range of parameter values of interest one or more parameter values for which the parameter error function is below a pre-selected threshold value of the parameter error function as the one or more fine-tuned estimates parameter value.

42. (Currently amended) In a position determining system, a method for calculating one or more fine-grained estimates, wherein said fine-grained estimates are for a signal parameter, and wherein said signal parameter is for a received signal, the method comprising the steps of:

receiving said received signal at a receiver;

pre-processing said received signal;

obtaining a set of coarse-grained correlations;

determining a set of fine-grained values of interest:

calculating a set of fine-grained correlations <u>by interpolating the coarse-grained correlations</u>, wherein each said fine-grained correlation is for one said fine-

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grained value of interest; and

determining the one or more fine-grained estimates based on said set of fine-grained correlations.

43. (Previously presented) The method of claim 42, wherein determining said set of fine-grained values of interest comprises the steps of:

determining a set of initial estimates for said signal parameter;

determining, based on a pre-selected confidence level, a plurality of ranges of fine-grained values of interest, wherein each said range corresponds to one said initial estimate; and

combining said plurality of ranges to yield said set of fine-grained values of interest.

44. (Previously presented) The method of claim 43, wherein calculating said set of fine-grained correlations comprises the steps of:

selecting one said fine-grained value of interest;

determining a subset of coarse-grained correlations from said set of coarse-grained-correlations based on a pre-selected desired accuracy and a type of filter;

interpolating said subset of coarse-grained correlations; and

repeating the above three steps for all the fine-grained values of interest in said set of fine-grained values of interest.

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45. (Previously presented) The method of claim 44, wherein determining said set

of initial estimates further comprises the step of calculating a set of coarse-grained correlation magnitudes.

46. (Previously presented) The method of claim 44, wherein determining said set of initial estimates further comprises the step of comparing the set of coarse-grained correlation magnitudes with a pre-selected magnitude threshold.

47. (Previously presented) The method of claim 45, wherein determining said set of initial estimates further comprises the step of determining a highest coarse-grained correlation magnitude.

48. (Previously presented) The method of claim 47, wherein determining said set of initial estimates further comprises the step of selecting coarse-grained correlation magnitudes that are within a pre-selected magnitude range of said highest coarse-grained correlation magnitude.

49. (Currently amended) The method of claim 44, wherein said set of coarse-grained correlations corresponds to a range of coarse hypothesized values for said signal parameter, wherein said range of coarse hypothesized values depends on:

an approximate time when said receiver received said received signal; <u>and</u>

a time uncertainty quantity associated with said approximate time~~;~~

~~an approximate position of said receiver; and~~

~~a position uncertainty quantity associated with said approximate position of said receiver~~.

50. (Currently amended) The method of claim 46, wherein said set of coarse-

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grained correlations corresponds to a range of coarse hypothesized values for said signal parameter, wherein said range of coarse hypothesized values depends on:

an approximate time when said receiver received said received signal; and

a time uncertainty quantity associated with the approximate time~~;~~

~~an approximate position of said receiver; and~~

~~a position uncertainty quantity associated with said approximate position of said receiver~~.

51. (Currently amended) The method of claim 47, wherein said set of coarse-grained correlations corresponds to a range of coarse hypothesized values for said signal parameter, wherein said range of coarse hypothesized values depends on:

an approximate time when said receiver received said received signal; and

a time uncertainty quantity associated with the approximate time~~;~~

~~an approximate position of said receiver; and~~

~~a position uncertainty quantity associated with said approximate position of said receiver~~.

52. (Currently amended) The method of claim 48, wherein said set of coarse-grained correlations corresponds to a range of coarse hypothesized values for said signal parameter, wherein said range of coarse hypothesized values depends on:

an approximate time when said receiver received said received signal; and

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a time uncertainty quantity associated with the approximate time~~;~~

~~an approximate position of said receiver; and~~

~~a position uncertainty quantity associated with said approximate position of said receiver~~.

53. (Previously presented) The method of claim 44, wherein calculating said set of fine-grained correlations is based on a band-limited interpolation technique.

54. (Previously presented) The method of claim 49, wherein calculating said set of fine-grained correlations is based on a band-limited interpolation technique.

55. (Previously presented) The method of claim 50, wherein calculating said set of fine-grained correlations is based on a band-limited interpolation technique.

56. (Previously presented) The method of claim 51, wherein calculating said set of fine-grained correlations is based on a band-limited interpolation technique.

57. (Previously presented) The method of claim 52, wherein calculating said set of fine-grained correlations is based on a band-limited interpolation technique.

58. (Previously presented) The method of claim 42, wherein determining said set of fine-grained estimates further comprises the step of calculating a set of fine-grained correlation magnitudes.

59. (Previously presented) The method of claim 58, wherein determining said set of fine-grained estimates further comprises the step of determining a highest fine-grained correlation magnitude.

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60. (Previously presented) The method of claim 59, wherein determining said set of fine-grained estimates further comprises the step of selecting fine-grained correlation magnitudes that are within a pre-selected magnitude range of said highest fine-grained correlation magnitude.

61. (Previously presented) The method of claim 58, wherein determining said set of fine-grained estimates further comprises the step of comparing said set of fine-grained correlation

magnitudes with a pre-selected magnitude threshold.

62. (Previously presented) In a position determining system, a method for calculating one or more finegrained estimates, wherein said fine-grained estimates are for a signal parameter, and wherein said signal parameter is for a received signal, the method comprising the steps of:

receiving said received signal at a receiver;

pre-processing said received signal;

obtaining a set of coarse-grained correlations;

determining a set of fine-grained values of interest:

generating a parametric template representing correlation values associated with said received signal;

calculating a weighted square error function by performing a linear regression for each said fine-grained value of interest; and

determining said one or more fine-grained estimates based on said weighted

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square error function.

63. (Previously presented) The method of claim 62, wherein determining said set of fine-grained values of interest comprises the steps of:

determining a set of initial estimates for said signal parameter;

determining, based on a pre-selected confidence level, a plurality of ranges of fine-grained values of interest, wherein each said range corresponds to one said initial estimate; and

combining said plurality of ranges to yield said set of fine-grained values of interest.

64. (Previously presented) The method of Claim 63, wherein the step of determining said one or more fine-grained estimates comprises the step of determining a lowest weighted square error value.

65. (Previously presented) The method of Claim 63, wherein the step of determining said one or more fine-grained estimates further comprises the step of comparing said weighted square error function with a pre-selected error threshold.

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